REMARKS

Present Status of the Application

The Office Action rejected claims 6 under 35 U.S.C. 102(e) as being anticipated by Kepler et al. (U. S. Patent 6,037,671; hereinafter Kepler). The Office Action rejected claims 1-5 under 35 U.S.C. 103(a) as bring unpatentable over Kepler. Applicant respectfully traverses the rejections for at least the reason set for the below. Claims 1-6 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejections

The Office Action rejected claims 6 under 35 U.S.C. 102(e) as being anticipated by Kepler. The Office Action rejected claims 1-5 under 35 U.S.C. 103(a) as bring unpatentable over Kepler. Applicants respectfully traverse the rejections for at least the reasons set forth below.

1. Applicants want to emphasize ***that the trench 110 (see FIG. 1) is a device structure but not a part of the alignment mark 106.*** In other words, the alignment mark 106 should have a save distance from the trench 110, so that the alignment mark 110 is not damaged.

The present invention has proposed the save distance by between about 5d to about 80d. In dependent claim 1 has recited the features as follows:

Claim 1. An alignment mark configuration, which is applicable on a substrate, the alignment mark configuration comprising:

an alignment mark on the substrate, wherein the alignment mark comprises a plurality of recesses and a spacing between the neighboring recesses is "d", wherein the recess has a width of about 2 microns to about 6 microns and the spacing "d" is a range of about 6 microns to

about 12 microns; and

***a trench, wherein a spacing between the trench and the alignment mark is of a range between about 5d to about 80d** (emphasis added).*

Likewise, independent claim 6 recites the features as follows:

Claim 6. (Newly added) An alignment mark configuration, which is applicable on a substrate, the alignment mark configuration comprising:

an alignment mark on the substrate, wherein the alignment mark comprises a plurality of recesses, wherein each of the recesses is rectangular-like and a spacing between the neighboring recesses is "d"; and

***a trench, wherein a spacing between the trench and the alignment mark is of a range between about 5d to about 80d** (Emphasis added).*

The alignment mark 106 includes several recesses separated by "d". The alignment mark 106 is separated from the trench 110 by ***about 5d to about 80d***. The trench 110 is not a part of the alignment mark but rather i.e. an actual device.

2. With respect to claim 6, in re Kepler, the alignment structure is the whole structure shown in Fig. 3 (col. 3, lines 22-23; col. 4, lines 33-40). In other words, Fig 3 does not show a trench, which is not belonging to the alignment mark. Fig. 4 is a partial cross-sectional view of the alignment structure.

In Fig. 3 and 4, several small sets of alignment mark 23 are shown. The set of alignment mark 23 include the recesses 23a. However, ***the middle section is the 23b but not the trench as improperly stated by the Office Action (page 3)***.

The W is the distance between the sets 23. All of the sets 23 are a portion of the alignment mark, as shown in Fig. 3. *Kepler failed to disclose the distance between the alignment mark and the trench, which is rather an actual device structure not for aligning, where*

in the trench, not belonging the alignment mark structure, is not shown at all in Kepler.

3. With respect to claims 1-5, in addition to at least the same foregoing reasons applied to claim 6, independent claim 1 has specifically define the size of the "d". The dimension of the alignment mark, in which the recess has a width of about 2 microns to about 6 microns and the spacing "d" is a range of about 6 microns to about 12 microns.

In the claim invention of claim 1, the "d" or the width of the recess are much larger than 0.375 microns, which is the recess section 23a within one set 23. In other words, based on the size, the set 23 is jus a substructure of the whole alignment mark structure in Fig. 3.

At least for these reasons, Kepler further failed to disclose the pattern as recited in claim 1-5 and 6.

4. Applicants also respectively remind that the "hindsight" with improperly construing the disclosure of prior art should be avoided.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1 and 6 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-5 patently define over the prior art references as well.

CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-6 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,
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